



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: AE3007C1 BYPASS RATIO: 5.1
 UNIQUE ID NUMBER: 6AL004 PRESSURE RATIO (π_{00}): 16.6
 COMBUSTOR: ENGINE TYPE: MTF RATED THRUST (F_{00}) (kN): 31.5

REGULATORY DATA **** DATA SUPERSEDED **** SEE FOLLOWING UID FOR REVISED DATA: **6AL023**

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	14.3	66.8	41.1	1.2
AS % OF ORIGINAL LIMIT	55.9	56.6	56.1	3.6
AS % OF CAEP/2 LIMIT (NO _x)			70.2	
AS % OF CAEP/4 LIMIT (NO _x)			71.3	
AS % OF CAEP/6 LIMIT (NO _x)			71.9	
AS % OF CAEP/8 LIMIT (NO _x)			76.4	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.322	0.24	0.87	17.90	1.0
CLIMB OUT	85	2.2	0.269	0.28	1.07	15.35	0.0
APPROACH	30	4.0	0.099	0.66	3.96	7.05	0.0
IDLE	7	26.0	0.042	4.84	26.04	3.37	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			138	346	1850	1175	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				11.0	58.6	37.4	1.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.3
TEMPERATURE (K)	288
ABS HUMIDITY (kg/kg)	0.0063

FUEL

SPEC	Jet A/JP-8
H/C	1.9
AROM (%)	16.5

MANUFACTURER: Rolls-Royce Corporation
 TEST ORGANIZATION: Rolls-Royce Corporation
 TEST LOCATION: Indianapolis, Indiana
 TEST DATES: 03/03/1994-19/04/1995

REMARKS

1. Results based on Rolls Royce report EDR 15171B

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)